

B2 ergonomic performance of the hand piece 30. By placing the memory 400 in the sheath of the end-effector, adequate electrical isolation of the circuitry in the memory 400 from the hand piece 30, the human operator thereof, and the patient is readily achieved. Also, the number of wires in cable 26 can be reduced.

IN THE CLAIMS:

Please amend the claims pursuant to 37 C.F.R. §1.121 as follows (see the accompanying "marked-up" version pursuant to §1.121):

1. (Amended) A system for implementing surgical procedures comprising:
an ultrasonic surgical hand piece having an end-effector with a sheath wherein
the end-effector is selected from the group consisting of a blade, shears, scissors and forceps;
a generator console for controlling the hand piece, wherein the console sends a
drive current to drive the hand piece which imparts ultrasonic longitudinal movement to the
blade; and
B3 a memory disposed in the sheath of the end-effector which optimizes operation
of the generator console for operation with the end effector to achieve optimal tissue effects
with the end effector, wherein the console reads information stored in the memory to determine
whether a copyrighted data string is present;
wherein the hand piece is authenticated for use with the console if the data string
is present.

2. (Amended) A system for implementing surgical procedures comprising: an
ultrasonic surgical handpiece having an end-effector,

B3

a generator console for controlling the hand piece wherein the console sends a drive current to drive the hand piece which imparts ultrasonic longitudinal movement to the end-effector; and

a memory disposed in a portion of the end-effector selected from the group consisting of a grip, handle and mounting, said memory optimizing the generator console for operation with the end-effector to achieve optimal tissue effects with the end-effector,

wherein the console reads information stored in the memory to determine whether a data string is present;

wherein the handpiece is authenticated for use with the console if the data string is present.

3. (Amended) A system for implementing surgical procedures comprising:
- an ultrasonic surgical handpiece having an end-effector;
- a generator console for controlling the handpiece, wherein the console sends a drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the end-effector; and

a memory disposed within a sheath of the end-effector which optimizes the generator console for operation with the end effector to achieve optimal tissue effects with the end-effector,

wherein the console reads information stored in the memory to determine whether a data string is present, wherein the handpiece is authenticated for use with the console if the data string is present.

9. (Amended) A system for implementing surgical procedures comprising:
an ultrasonic surgical handpiece having a detachable end-effector;
a generator console for controlling the handpiece, wherein the console sends a
drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the
end-effector; and
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a memory disposed within the end-effector, which optimizes the generator
console for operation with the end-effector to achieve optimal tissue effects with the end-
effector wherein the console writes historical usage and diagnostic information and
configuration information into the memory;
wherein the diagnostic information are selected from the group consisting of
number of activations, duration of activations, number of uses with substantial time between
use, diagnostic error codes, enable use, disable use, serial number of the generator console,
and serial number of the handpiece.

10. (Amended) A system for implementing surgical procedures comprising:
an ultrasonic surgical handpiece having a detachable end-effector selected from
the group consisting of a blade and shears;
a generator console having a digital signal processor (DSP) for controlling the
handpiece, wherein the console sends a drive current to drive the handpiece which imparts
ultrasonic longitudinal movement to the end-effector; and a memory disposed in the end-
effector which optimizes the generator console for operation with the end-effector to achieve
optimal tissue effects with the end-effector,
wherein the console reads the memory and determines if the end-effector has

B4
been disabled for disabling the console from driving the end-effector.

12. (Amended) A system for implementing surgical procedures comprising:
an ultrasonic surgical handpiece having an end-effector selected from the group
consisting of a blade and shears;
a generator console having a digital signal processor for controlling the
handpiece, wherein the console sends a drive current to drive the handpiece which imparts
ultrasonic longitudinal movement to the end-effector; and
a memory disposed with the end-effector which optimizes the generator console
for operation with the end-effector to achieve optimal tissue effects with the end-effector,
wherein the console reads information stored in the memory and displays the
information and an interpretation of the information on the console display.

B5
17. (Amended) The system of claim 12 wherein the memory is used in conjunction
of specialized instruments selected from the group consisting of artery devices, homogenizers
and liquifiers.

B7
32. (Amended) A method for implementing surgical procedures in a system
including an ultrasonic surgical hand piece having an end-effector with a sheath, a console for
controlling the hand piece, and a memory disposed in the sheath of the end-effector which
optimizes the generator console for operation with the end-effector to achieve optimal tissue
effects with the end-effector, the method comprising the steps of:

reading information stored in the memory;

determining whether a copyrighted data string is present in the memory;
authenticating use of the hand piece with the console if the data string is present;
sending a drive current to drive the hand piece; and
imparting ultrasonic movement to the blade.

44. (Amended) A system for implementing surgical procedures comprising:
an ultrasonic surgical handpiece having an end-effector;
a generator console for controlling the handpiece, wherein the console sends a
drive current to drive the handpiece which imparts ultrasonic longitudinal movement to the
end-effector; and
a memory disposed with a sheath of the end-effector which optimizes the
generator console for operation with the end-effector to achieve optimal tissue effects with the
end-effector,
wherein the console reads information stored in the memory to determine
whether a data string is present, wherein the end-effector is authenticated for use with the
handpiece if the data string is present.